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WO 2004/001021

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Furthermore, no account is taken of the total amount of energy used during the pasteurisation process.

WO-A-00/15045 and WO-A-01/67886 both refer to the use of *Mucorales* fungi for use in the preparation of foodstuffs. The first of these documents refers to the need to perform RNA reduction before including the cells into foods, and suggests using a heating step. A separate pasteurisation or heat shock can be performed. The second document suggests that a heating step to reduce RNA content may be avoided by allowing the fungal cells to be kept inside the fermenter vessel, and be allowed to "ripen".

International patent application no. PCT/EP01/08902 refers to process for preparing oil mixtures by combining a crude $\omega 6$ with a crude $\omega 3$ PUFA-containing oil, to produce an oil mixture, and then purifying the crude oil mixture.

Processes involving heating biomass, or microbial cells, are known. It is also known, from WO-A-97/37032, that microbial cells can be pasteurised prior to extraction to a PUFA therefrom in the form of an oil. However, the present applicants have found that a new pasteurisation process can improve the quality of the oil that can be extracted from the pasteurised cells. In particular, the resulting oil may oxidise less, or be less oxidised, and may have a low peroxide value (POV) and/or anisidine value (AnV). In addition, the applicants have found that this new pasteurisation process is more efficient because it requires less energy. The process is therefore advantageous because not only may it improve the quality of the oil, but it may reduce costs since less energy is required.

Brief Description of Drawings

Figure 1 is a graph of temperature (°C) against time (minutes) for three pasteurisation protocols (A and C are within the invention, B is provided for comparison);

Figure 2 is a graph of temperature (°C) against time (minutes) for pasteurisation at three different temperature plateaus (40, 70 and 85°C);

Figure 7 and 4 are graphs of AnV (and PUV for Fig. 3) against time (hours);
Figure 5 is a graph of POV (meq/kg) and AnV against temperature (°C) for pasteurisation at two different (residence/plateau) times (8 and 300 seconds);

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